



HAMMOND AIR POLLUTION CONTROL

CITY OF HAMMOND, INDIANA 46320

5925 CALUMET AVENUE

PHONE (219) 853-8308

June 4, 1979

Mr. John Jagiella
Steel Containers, Inc.
3631 State Line
Hammond, Indiana 46327

Dear Mr. Jagiella:

We regret to inform you that your application for an installation permit for the Pail Incinerator afterburner has been denied. The reason for the denial is inadequate information. Many of the questions are similar to the ones posed for the Drum Incinerator Afterburner. All questions are included in this transmittal, for the purposes of clarity.

The questions we have concerning the application are listed below. Please answer all questions completely and include any supplementary information which will help us in evaluating your application.

1. Page 2 - The plot plan does not appear accurate based on recent observations at the plant. Please ensure that all buildings are correct.
2. Page 2 - Is the area designated as "State Line and Indiana City Rail Road" owned by Steel Containers, Inc. or by someone else?
3. Page 3 - The design capacity is rated at 150 pails per hour. A counting mechanism must be included in the revised plans and specifications. These records must be maintained on an hourly basis for the period that the operation permit is issued.

4. Page 3 - The 85% control efficiency should be documented. U.S.E.P.A. Publication 29-12 states the material in drums to be reclaimed is roughly equivalent to No. 6 fuel oil. It does not state, however, that emissions from the burning of the waste material is equivalent to burning No. 6 fuel oil in an industrial boiler designed for fuel oil combustion. Please contact the manufacturers and obtain test reports verifying the emission rates of the unit.
5. Page 5 - On Page 3 of this application the type of waste to be incinerated was identified as oil, grease and paint, Page 5 identifies the waste merely as oil. Please clarify this point. In view of the hazardous materials which have been found on and adjacent to Calumet Containers a detailed listing of materials to be incinerated must be submitted. Any materials not listed will not be allowed in the incinerator.
6. Page 5 - Please note the 150 pail/hour maximum design rate and comment number 3. The 300,000 pails per year figure must be verified by the hourly records which are maintained. Any pails reclaimed over 300,000 per year will be a violation.
7. Page 5 - The flow diagram shows that the sludge from this operation will be disposed of at Sexton or C.I.D. landfill. Please assure this Agency that this material will not be disposed of by burning in the incinerator.
8. Page 6 - The quantity burned per year and the quantity burned per hour does not agree with the quantities listed on page 3. Please clarify these points. Natural gas supply is currently restricted in our area. Provision should be made for an auxiliary fuel should a curtailment occur.
9. Page 7A - Please see comment number 4 with reference to the efficiency and emission estimates.
10. Page 7A2 - The conveyor drive is said to be of variable speed. Please note that a maximum of 150 pails/hour will be allowed and must be verified.

11. Page 7A2 - The guarantee states that the only emissions guarantee will be for smoke. This apparently relates to opacity, therefore to verify compliance an opacity monitor must be included in the revised plans and specifications. The monitor records must be identified by time and date and they must be maintained for the period of the operation permit.
12. Page 7A2 - The afterburner temperature is listed as 1400°F. This must be verified by the inclusion of a temperature monitoring device in the afterburner chamber. The recording charts must be identified as to date and time and maintained for the period the operation permit is in force.
13. Page 7A2 - Emission from the stack are identified as oxides, chlorides and sulphides. Please identify in detail these compounds for proper evaluation of the pail incinerator's compliance status.
14. Page 7A3 - The fifth paragraph refers to burning unknown waste in the pail incinerator. Please be advised that only permitted wastes will be allowed to be incinerated. All pails coming into the plant must be inventoried and their contents identified. These records must be maintained for the duration of the operation permit. Please address this point in your revised application.
15. Page 7A10 - As stated in question number 4, AP-40 indicates that the drum contents can be approximated by No. 6 fuel oil, it does not state that burning this material in a reclamation incinerator emits the same amount of particulate as burning No. 6 fuel oil in an industrial boiler designed for fuel oil combustion.
16. Page 7B - This information should be submitted in a separate application for an operation permit.
17. Page 7C - This information should be submitted in a separate application for an operation permit.
18. Page 8 - The liquid is defined as oil, paint etc. Please define all materials to be stored and their chemical constituencies. A listing of your pail suppliers could be submitted to Hammond Air Pollution Control to enable us to verify the chemical make-up of all waste materials being incinerated.

19. Page 9 - This page should be submitted in a separate application for operation permits. In addition the paint manufacturer and manufacturer number must be included in the application.
20. Drawings - The drawings must be stamped by a professional Engineer registered to practice in the State of Indiana. This is in accordance with State APC-19, Section 2 (9) (4).
21. AP-40 indicates that 90% of all drums contain approximately 4 pounds of residue while the other 10% can have up to 20 pounds of residue. Your application assumes a 5 gallon pail contains 10 per cent of the residue of a 55 gallon drum. Ten per cent of your pails, therefore, will contain up to 2 pounds of residue. What procedures will be used to process the pails that contain larger amounts of residue?
22. What will be the retention time of pails in the main chamber?
23. What spacing intervals will be used for processing pails?
24. What spacing intervals will be used for processing pails with over .4 pounds of residue?
25. Please note that the only emission which will be allowed from this process will be from the stack designated as S2. Any fugitive emissions coming from this process will be considered a violation of Hammond Ordinance #3522 (as amended) unless those emissions are inventoried on the installation permit application.
26. The amount of material to be incinerated in your pail reclamation incinerator should reflect the 10 per cent of the pails which contain up to 2 pounds of residue. A more conservative figure for pounds of residue entering the incinerator would be:

$$\begin{aligned} 135 \text{ pails/hr.} \times .4 \text{ lb./pail} &= 54 \text{ lb./hr.} \\ 15 \text{ pails/hr.} \times 2 \text{ lb./pail} &= \underline{30 \text{ lb./hr.}} \\ \text{Total} &= 84 \text{ lb./hr.} \end{aligned}$$
27. The emission of particulate matter from the main chamber of the pail incinerator cannot be considered as equivalent to burning No. 6 fuel oil in an industrial boiler. As discussed in our letter dated May 18, 1979 concerning the drum incinerator

20% of the material entering the main chamber as residue on the pail should be considered as becoming particulate matter and entering the pail incinerator secondary chamber.

If you have any questions concerning this matter please contact the undersigned.

Sincerely,

David L. Herrin
David L. Herrin, Chief Engineer
Hammond Air Pollution Control

enc: 2 copies of Installation Permit forms
with associated drawings.

2 copies of blank Installation permit
application forms

cc: U.S.E.P.A., State of Indiana

attachment: \$20.00 Cash